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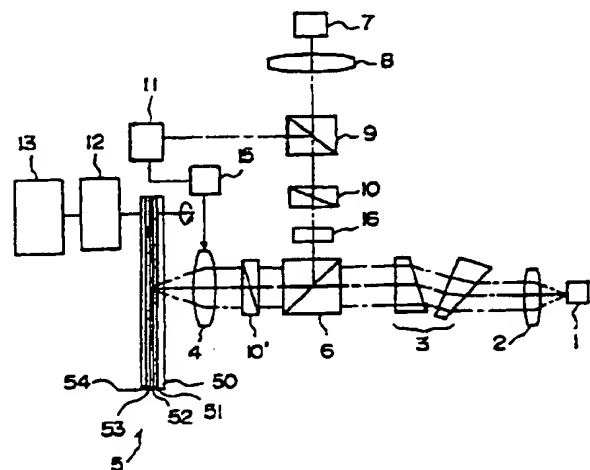
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(54) **Method and device for initializing optical recording medium of phase change type, and optical recording medium**

(57) A device for initializing an optical recording medium (5) includes a semiconductor laser diode (1), and an optical system which projects a laser beam emitted from the semiconductor laser diode onto the optical recording medium. A half-value width of a spot of the laser beam focused on the optical recording medium is equal to 1/2 to 1/6 times a half-value width of a near-field pattern of the semiconductor laser diode in a direction parallel to a junction interface of the semiconductor laser diode, so that the optical recording medium can be evenly initialized by the laser beam.

FIG. 1



EP 0 848 379 A3



European Patent
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Application Number
EP 97 10 5120

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The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 12 April 2000	Examiner Bernas, Y
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03 82 (P/4/2011)



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EUROPEAN SEARCH REPORT

Application Number
EP 97 10 5120

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<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03 82 (P04C01)



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Application Number

EP 97 10 5120

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 97 10 5120

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-4 12,17

The first subject-matter concerns a device and method for initializing an optical disc as well as the disc initialized by this method, by which, the half-value width of the focussed spot is $1/2$ to $1/6$ of the half-value width of the near-field pattern of the semi-conductor laser, in the direction of the junction.

2. Claims: 5-7,13,14,18

The subject-matter concerns a device and method for initializing an optical disc as well as the disc initialized by this method, by which the spot is not focussed on the recording layer but on either side of the recording layer.

3. Claims: 8-11,15-16,19

The third subject-matter concerns a device and method for initializing an optical disc as well as the disc initialized by this method, by which the intensity profile of the laser used shows a specific degree of evenness.

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 97 10 5120

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